

**Testimony of Alan B. Dash**  
**Perfect Power LLC**  
**Director – MicroGrid Networks LLC**

---

Thank you for the opportunity to provide testimony regarding electricity outages and communication failures in and around New York City resulting from Tropical Storm Isaias on August 4, 2020. I am Alan Dash, President of Perfect Power, LLC, which, together with SER Capital Partners (SER), holds a majority interest in MicroGrid Networks (MGN), a New York City-based developer of distributed energy storage systems.

MGN was founded in 2008 as ArcStar Energy, a developer and provider of contract development and acquisition services for solar and wind projects, working with many of the world's largest energy companies. Since 2017, MGN has transitioned its business to energy storage given the promise of the technology and need for it on our electricity system. MGN has deep expertise, and has developed a proprietary database to focus its development efforts specifically on targeted distribution systems that are in the most need of strengthening.

I submit this testimony to bring to your attention and emphasize the urgent need for State policy and utility rules to be harmonized so that they encourage, instead of hinder, the expedient, safe and appropriate interconnection and operation of distributed energy storage systems. In the wake of the widespread forced outages and brownouts caused by insufficient system infrastructure and Tropical Storm Isaias – the most outages and brownouts ever, other than from Hurricane Sandy – and in light of the State's ambitious goals with respect to deployment of energy storage, rapid and smart deployment of energy storage systems across the Con Edison service territory is essential. Energy storage can help make our electricity

system more efficient and reliable, achieve the ambitious deployment goals set out in the 2019 Climate Leadership and Community Protection Act (CLCPA) and – consistent with the imperative to Build Back Better as New York’s economy recovers from COVID-19 – bring good jobs to everyday New Yorkers.

[NYSERDA’s website](#) states,

Energy storage is critical to New York’s clean energy future. As renewable power sources like wind and solar provide a larger portion of New York’s electricity, storage will allow clean energy to be available when and where it is most needed. As New York continues to invest and build its cleaner grid, energy storage will allow us to better use existing resources more efficiently and with fewer emissions. With storage, New York’s grid can reduce electricity from the dirtiest power plants during periods of peak demand, such as on hot summer days... Additionally, energy storage can stabilize supply during peak electric usage and help keep critical systems online during an outage. All of this while creating an industry that could employ 30,000 New Yorkers by 2030.

When Tropical Storm Isaias hit, 104,497 customers in New York City lost electricity, including 44,546 in Queens, 27,179 on Staten Island, 22,648 in the Bronx and 10,057 in Brooklyn. In total, more than 130,000 New York City customers were without electric service at one point during the evening. Expanding the review to Long Island and Westchester, some of the most severe outages left customers in the dark for two weeks – all while the contents of their refrigerators and freezers spoiled. But utility system reliability issues are not limited to major weather events. For example, July of this summer was a hot but unexceptional month. Nevertheless, Queens electric customers were warned by Tweet that they could be subject to outages if they did not conserve electricity.

In December 2018, with only approximately 50 megawatts (MWs) of energy storage deployed throughout New York State, the Public Service Commission issued its *Order Establishing Energy Storage Goal and Deployment Policy (“Energy Storage Order” or “Order”)*.

One MW is the energy equivalent of powering approximately 650 average homes. In that Order the Commission set deployment goals of 3,000 MWs of energy storage by 2030 and 1,500 MWs by 2025. In the spring of 2019, NYSERDA issued its bridge incentive program, providing needed financial assistance to kickstart this important market, and the 2019 CLCPA codified the goal of 3,000 MWs of energy storage by 2030. However, nearly two years after the Commission issued its 2018 Order, there are still only two major battery energy storage systems operational in New York City – where resiliency needs and system values are highest – and the initial incentives from NYSERDA’s bridge incentive program have been nearly depleted.

MGN currently has 18 energy storage system projects in advanced stage of development, mostly in Queens and Brooklyn, which represent a private sector investment of approximately \$170 million and capacity of 70 MWs. We anticipate funding seven (7) of these projects this year, committing \$65 million, and we expect to make more funding decisions soon. In order to protect such a significant investment and ensure safe and reliable operations, MGN maintains the highest technical and engineering standards, having engaged expert consultants to execute the engineering, procurement and construction of the projects. All projects are clean, quite and attractive energy systems that will be constructed above the 500-year floodplain, using one of three options: ground mounted, roof mounted, or depending on project constraints, elevated platforms (renderings attached as Exhibit A). Elevated platforms are more costly to develop but are useful in areas where preserving ground space is important (parking spaces, for example), and include features like hurricane screens that withstand winds of up to 180 MPH, a solar canopy roof above, EV charging below, and incorporate emergency and public communications equipment that can be remotely monitored and maintained.

Moreover, MGN is fully engaged with the New York City communities in whose neighborhoods these zero-emission facilities will be placed. Beyond the enhanced grid resiliency and zero-emissions benefits these energy storage projects provide, tax or PILOT revenue is also generated for municipalities and school and other special districts, which serves as an opportunity to further enhance the social fabric of host communities.

We believe that battery energy storage systems can be an important part of the solution to make New York's electricity system more safe, reliable and resilient, while reducing the frequency, duration and severity of power outages. However, current interconnection processes have proven to be costly and unpredictable. Certain charges in utility tariffs continue to challenge New York City energy storage investment decisions and operations. Furthermore, the installation of battery energy storage systems in New York City is subject to a rigorous review by the Fire Department of New York, the Department of Environmental Quality, Department of Buildings, and community boards, as well as others. The development process involves putting substantial capital at risk, and typically requires up to three years with no guarantee of success.

In order to succeed in our mission, help the State achieve its clean energy and emissions reductions goals, and mitigate the potential of future outages through increased resilience, we respectfully submit that the Public Service Commission (PSC), the New York State Energy Research and Development Authority (NYSERDA) and Con Edison must relieve the difficulties of developing energy storage in New York City. We urge the respective Legislative Committees overseeing this hearing to strongly support the PSC's and NYSERDA's acceleration of changes to the utility tariffs, interconnection requirements and incentive programs that must be improved

if we are to efficiently deploy energy storage systems in New York City at the scale needed to harden our electricity grid and meet the State's ambitious and laudable deployment targets.

## EXHIBIT A

Rendering of a distributed energy storage system with elevated platform.



Rendering of a distributed energy storage system for roof and ground level applications.



MGN Roof and Ground Level Energy Facility